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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,443	02/06/2004	Takeshi Morikawa	018656-681	5146

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EXAMINER
RILEY, MARCUS T

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
01/21/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

	Application No.	Applicant(s)
Office Action Summary	10/772,443	MORIKAWA ET AL.
	Examiner	Art Unit	
	MARCUS T. RILEY	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/20/2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some *   c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *02/06/2004; 04/04/2006* .

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1.   This office action is responsive to applicant's remarks received on October 20,

2009. Claims 1-19 remain pending.

Response to Arguments

2.   Applicant's arguments with respect to amended claims 1, 4 & 11 filed on October

20, 2009 have been fully considered but they are not persuasive.

A: Applicant's Remarks

For Applicant's remarks see *"Applicant Arguments/Remarks Made in an*

Amendment" filed October 20, 2009.

A: Examiner's Response

Applicant argues that the cited references do not disclose wherein the processing

of said next job is executed on a page unit basis, a band unit basis, or a block unit basis,

depending on the minimum processing time for said next job.

Examiner understands Applicant's arguments but respectfully disagrees. Yoshida

'757 either alone or in combination with Watanabe '367 discloses, teaches or suggest the

Applicant's claimed invention. Yoshida '757at Fig. 24, Step S53-S59 and Column 17,

lines 14-43 discloses wherein the processing of said next job is executed on a page unit

basis, a band unit basis, or a block unit basis, depending on the minimum processing time

for said next job. For example, The CPU 103 executes the jobs based on the priorities.

The print jobs are executed page by page based on the priorities and the registered times.

Thus, Yoshida '757 either alone or in combination with Watanabe '367 discloses, teaches

or suggest the Applicant's claimed invention. As a result, Applicant's application is not

in condition for allowance.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1-8, 10-15 & 17-19** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yoshida et al. (US 6,130,757 hereinafter, Yoshida '757) in

combination with Watanabe (US 6,741,367 B1 hereinafter, Watanabe '367).

   Regarding claim 1; Yoshida '757 discloses a data processing apparatus

comprising (Fig. 2, Copying Machine 1):

   one or more compression/decompression units (Fig. 4, Compressing Unit 311 and

Decompressing Unit 312) that compress the data for the input job and decompress the

compressed data (i.e. Image data is compressed by compressing unit 311 and is stored into code memory 306 as

compressed image data and the image data is read from code memory 306, decompressed by decompressing unit 312,

and written into image memory 304 as decompressed image data. Column 8, lines 1-34).

   wherein the processing of said next job is executed on a page unit basis, a band

unit basis, or a block unit basis, depending on the minimum processing time for said next

job (Fig. 24, Step S53-S59 i.e. CPU 103 executes the jobs based on the priorities. The print jobs are executed page by page based on the priorities and the registered times. Column 17, lines 14-43).

Yoshida '757 does not expressly disclose a controller that, a controller that when a processing request is issued for processing of the data for a next job by said compression/decompression unit(s) during processing of the data for a current job by said compression/decompression unit(s), obtains the processing wait period between pages of said current job, determines whether or not the data for said next job will undergo compression or decompression based on a comparison between the minimum processing time for said next-job data and said processing wait period and controls the execution of processing of said next job by said compression/ decompression unit(s) between pages of said current job in accordance with this determination.

Watanabe '367 discloses a controller (Fig. 1, Controller 2) that when a processing request is issued (Fig. 10, Execution Task i.e. Controller 2) for processing of the data for a next job by said compression/decompression units (Fig. 1 Compressor/Decompressor 32) during processing of the data for a current job by said compression/decompression units (Fig. 10 i.e. The execution task begins the processing of the next and current job of the compressor/decompressor 32. Column 11, lines 57-64 and Column 1, line 56 thru Column 2, line 19);

obtains the processing wait period between pages of said current job (Fig. 11 Steps S402 & S403) determines whether or not the data for said next job will undergo compression or decompression based on a comparison between the minimum processing time for said next-job data and said processing wait period (Fig. 11 Steps S401-S409 i.e. Steps S402 and S403 shows if the conveyance of the sheet of the paper P has been started, the CPU 6 obtains start time t1 which represents the time when the conveyance started at Step S402. Moreover, CPU 6 further obtains present time t2 at a predetermined timing

after the conveyance started at Step S403. At Step S405, the CPU 6 compares a lapsed time period since the conveyance stated with a predetermined time difference (T1-T2). Column 12, line 32 thru Column 13, line 8.)

and controls the execution of processing of said next job by said compression/ decompression units between pages of said current job in accordance with this determination (i.e. The processor may discriminate whether a present period is a period for transferring the image data or the compressed image data and may control the compressor/decompressor to decompress the original data in the buffer when the processor discriminates that the present period is not the period for transferring the image data or the compressed image data to the image forming mechanism. Column 2, lines 43-56 and column 1, lines 23-26).

Yoshida '757 and Watanabe '367 are combinable because they are from the same field of endeavor of image forming apparatuses (Watanabe '367 at *"Field of Invention"*).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the data processing apparatus as taught by Yoshida '757 by adding a controller and compression/decompression units as taught by Watanabe '367. The motivation for doing so would have been to reduce process time for printing with efficient data compression/decompression in an image forming apparatus. Therefore, it would have been obvious to combine Yoshida '757 with Watanabe '367 to obtain the invention as specified in claim 1.

Regarding claim 2; Yoshida '757 discloses where the processing wait period is longer than said minimum processing time, said controller permits said compression/ decompression unit(s) to process said next job between pages of said current job (See Figs. 20A and 20B wherein Fig. 20A is a timing chart showing timings where the compressor/decompressor is used for compressing/decompressing the print data and the image data; and Fig. 20B is a diagram showing a relationship between a period for decompressing the print data shown in Fig. 20A and the print data to be decompressed).

Regarding claim 3; Yoshida '757 discloses where the said job includes a copy job in which image data for an original document ready by an original document reader is printed out or a print job in which image data received from an external terminal is printed out (i.e. Each of copying machines 1, 4, and 6 includes such functions as image reading, image processing with which read images are edited, and printing. Column 4, lines 25-26).

Regarding claim 5; Yoshida '757 discloses where the said next-job attribute consists of whether the data processing for the next job is to take place on a page unit, band unit or block unit basis (Fig. 24, Step S53-S59 i.e. CPU 103 executes the jobs based on the priorities. The print jobs are executed page by page based on the priorities and the registered times. Column 17, lines 14-43 and Column 11, lines 29-33).

Regarding claim 6; Yoshida '757 discloses where the said next-job attribute consists of the type of the next job (i.e. The job IDs are job identification numbers for the transmissions. The priorities indicate the priorities of the jobs for transmissions. Column 11, lines 38-43).

Regarding claim 7; Yoshida '757 discloses where said next-job attribute consists of the input source for the next job (Fig. 4 Input/Output Controlling Unit 50 i.e. CPU 103 instructs external input/output controlling unit 50 to output the image data to send the image data to another apparatus for a requested job. Column 7, lines 23-34).

Regarding claim 8; Yoshida '757 discloses where said next-job attribute consists of whether the data is binary data or multi-value data (Fig. 4 Multi-Valuing Unit 308 i.e. The Multi-Valuing Unit determines that the data is multi-value data. Column 8, lines 33-37).

Regarding claim 4 & 11; Claims 4 & 11 contains substantially the same subject matter as claim 1. Therefore, claim 4 & 11 are rejected on the same grounds as claim 1.

Regarding claims 10 & 19; Claim 10 & 19 contains substantially the same subject matter as claim 3. Therefore, claims 10 & 19 are rejected on the same grounds as claim 3.

Regarding claim 12; Claim 12 contains substantially the same subject matter as claim 5. Therefore, claim 12 is rejected on the same grounds as claim 5.

Regarding claim 13; Claim 13 contains substantially the same subject matter as claim 6. Therefore, claim 13 is rejected on the same grounds as claim 6.

Regarding claim 14; Claim 14 contains substantially the same subject matter as claim 7. Therefore, claim 14 is rejected on the same grounds as claim 7.

Regarding claim 15; Claim 15 contains substantially the same subject matter as claim 8. Therefore, claim 15 is rejected on the same grounds as claim 8.

Regarding claim 17; Claim 17 contains substantially the same subject matter as claim 2. Therefore, claim 17 is rejected on the same grounds as claim 2.

Regarding claim 18; Watanabe '367 discloses where said controller compares said next-job data minimum processing time and said processing wait period after the next-job attribute is identified (Fig. 11 Steps S401-S409 i.e. At Step S405, the CPU 6 compares a lapsed time period since the conveyance stated with a predetermined time difference (T1-T2). Column 12, line 32 thru Column 13, line 8.)

5.   **Claims 9 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida '757 in combination with Watanabe '367 as applied to claim 1 above, and further in view of Nishikawa '046 et al. (US 6,934,046 hereinafter, Nishikawa '046).

Regarding claim 9; the combination of Yoshida '757 does not expressly disclose where said next-job attribute consists of whether the data is monochrome data or color data.

Nishikawa '046 discloses where said next-job attribute consists of whether the data is monochrome data or color data (Fig. 12 Step 1202 i.e. Field 1202 denotes physical page setting information in which the setting of layout or color/monochrome is stored when the layout or the color/monochrome can be designated for each physical page. Column 19, lines 16-33).

Yoshida '757 and Nishikawa '046 are combinable because they are from the same field of endeavor of a data processing apparatus (Nishikawa '046 at *"Field of Invention"*).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the data processing apparatus as taught by Yoshida '757 by adding a next-job attribute consisting of whether the data is monochrome data or color data as taught by Nishikawa '046. The motivation for doing so would have been to provide color variations to the layout of a page and to provide a plurality of page layouts for each physical page. Therefore, it would have been obvious to combine Yoshida '757 with Nishikawa '046 to obtain the invention as specified in claim 4.

Regarding claim 16; Claim 16 contains substantially the same subject matter as claim 9. Therefore, claim 16 is rejected on the same grounds as claim 9.

Examiner Notes

6.   The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified

citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Conclusion

7.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

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more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

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Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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